

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Currently Amended) A metal molding method for forming a metal body in a predetermined shape with a mold, the mold comprised of

a metal body lead-in space,

a molding space having a communicating region that communicates with the metal body lead-in space, and a molding region extending from the communicating region, the communicating region being at a proximal end of the molding region,

a hole forming pin extending toward the proximal end from a distal end of the molding region, and

a cylindrical collar having an inner peripheral surface in sliding contact with the hole forming pin and an outer peripheral surface thereof being in sliding contact with an inner peripheral surface of the mold in the molding region, the method comprising the steps of:

inserting the metal body into the metal body lead-in space of the mold;

feeding the metal body into the molding space of the mold under a predetermined pressure; and

forming the metal body by moving a communicating-region-side end surface of the collar to a distal end side of the molding region along with the feeding of the metal body into the molding region ~~in which using a mold having a molding space with a predetermined shape and a metal body lead-in space communicating with the molding space, a metal body which is inserted into the metal body lead-in space is fed to the molding space under a predetermined pressure thus forming a molded body having a predetermined shape.~~

2. (Currently Amended) [[A]] The metal molding method according to claim 1, further comprising a step of deforming the metal body by shearing thereby transforming a metal structure of the metal body into a finer grain structure, wherein a feeding direction of the metal body into the molding region from the communicating region is different from an inserting direction of the metal body into the metal body lead-in space in the mold ~~wherein the metal body is deformed by shearing at the time of feeding the metal body into the molding space from the metal body lead-in space thus turning the metal structure of the metal body into the finer grain structure.~~

3. (Currently Amended) [[A]] The metal molding method according to claim 1, wherein further comprising a step of bending the metal body by feeding the metal

body through a bent portion of the mold thereby transforming the metal structure of the metal body, wherein the bent portion is in at least one of the metal body lead-in space and the molding space ~~includes a bent portion which bends the fed metal body.~~

4. (Cancelled)

5. (Currently Amended) [[A]] The metal molding method according to claim [[4]] 1, ~~wherein the~~ further comprising projecting the metal body ~~which passes through the molding region is allowed to project to [[the]] an~~ outside of the mold after passing the metal body through the molding region, thereby extruding a projecting portion; ~~and a projecting portion is molded by pressing into a predetermined shape.~~

6-7. (Cancelled)

8. (Currently Amended) [[A]] The metal molding method according to claim [[7]] 1, ~~wherein the~~ further comprising moving the collar ~~is moved~~ along the hole forming pin by a predetermined distance and, thereafter, pressing the hole forming pin ~~is pushed~~ into the communicating region.

9. (Currently Amended) [[A]] The metal molding method according to claim 8, wherein the method further comprises a step of retracting a cylinder for feeding the

~~metal body~~ when the hole forming pin is pushed into the communicating region, a cylinder which supplies the metal body into the metal body lead-in space by pressing the hole forming pin into the communicating region ~~is retracted~~.

10. (Currently Amended) [[A]] The metal molding method according to any one of claims claim 1 [[to 9]], wherein the metal body is inserted into and fed from a plurality of metal body lead-in spaces, the mold further comprised of the [[a]] plurality of metal body lead-in spaces which communicate with each other by way of the communicating region, and each of the plurality of metal body lead-in spaces face another of the metal body lead-in spaces in an opposed manner ~~are provided~~.

11. (Currently Amended) A metal molding machine comprising:

a mold ~~in which~~ comprised of a molding space ~~having a predetermined shape~~ and a metal body lead-in space which are ~~communicated~~ in communication with each other; ~~are formed, and~~

a pressing means for pressing ~~which feeds~~ a metal body inserted into the ~~molding space from the~~ metal body lead-in space and for feeding ~~by pressing~~ the metal body into the molding space from ~~which is inserted into~~ the metal body lead-in space ~~thus forming a molded body having a predetermined shape, wherein~~

the molding space is formed of a communicating region in communication with the metal body lead-in space and a molding region forming the metal body passing through the communicating region into a predetermined shape,

the molding region extends from the communicating region, the communicating region being at a proximal end of the molding region,

a hole forming pin extending toward the proximal end from a distal end of the molding region is formed in the molding region,

a cylindrical collar having an inner peripheral surface in sliding contact with the hole forming pin and an outer peripheral surface in sliding contact with an inner peripheral surface of the mold is mounted on the hole forming pin, and

the metal molding machine further includes a collar control means for gradually moving a communicating-region-side end surface of the collar to a distal end side of the molding region along with the feeding of the metal body into the molding region.

12. (Original) A metal molding machine according to claim 11, wherein at least one of the metal body lead-in space and the molding space includes a shearing deforming means which deforms the metal body by shearing.

13. (Currently Amended) A metal molding machine according to claim 12, wherein the shearing deforming means is constituted of a bent portion which ~~bents~~ bends the fed metal body.

14. (Cancelled)

15. (Currently Amended) The [[A]] metal molding machine according to claim [[14]] 11, wherein the metal molding machine includes a pressure molding means which allows the metal body ~~which~~ that passes through the molding region to project to the outside of the mold and molds a projecting portion into a predetermined shape by pressing.

16-17. (Cancelled)

18. (Currently Amended) The [[A]] metal molding machine according to claim [[17]] 11, wherein the metal molding machine includes a hole forming pin control means which moves the collar along the hole forming pin by a predetermined distance and, thereafter, pushes the hole forming pin into the communicating region.

19. (Currently Amended) The [[A]] metal molding machine according to claim [[18]] 11, ~~wherein~~ the metal molding machine ~~includes~~ further comprising a cylinder control means ~~which~~ that retracts a cylinder which supplies the metal body into the metal body lead-in space by pressing when the hole forming pin is pushed into the communicating region using the hole forming pin control means.

20. (Currently Amended) The [[A]] metal molding machine according to ~~any one of claims~~ claim 11 to 19, ~~wherein~~ the machine further comprising a plurality of metal body lead-in spaces ~~are provided~~ , wherein each of the plurality of metal body lead-in spaces face another of the metal body lead-in spaces in an opposed manner and the metal body lead-in spaces communicate with each other by way of the communicating region.

21. (Currently Amended) [[A]] The metal molded body ~~being characterized in that using a mold in which a molding space having a predetermined shape and a metal body lead-in space which is communicated with the molding space are formed, a metal body which is inserted into the metal body lead-in space is fed into the molding space while applying a predetermined pressure to the metal body thus forming the metal molded body having a predetermined shape, wherein~~

~~the metal structure of the metal body fed into the molding space is turned into the finer grain structure~~ formed by the metal molding method of claim 1.

22. (Cancelled)

23. (Currently Amended) ~~[[A]] The metal molded body according to claim 22, wherein the feeding direction of the metal body is bent in the communicating region~~ by the metal molding method of claim 3.

24. (New) The metal molding method according to claim 10, wherein the feeding is performed on the metal body by separately controlling the extension and retraction of a first columnar cylinder and a second cylindrical cylinder, wherein a cylinder is comprised of the first columnar cylinder and the second cylindrical cylinder, the second cylindrical cylinder being slidably mounted in the first columnar cylinder.

25. (New) The metal molding method according to claim 1, wherein the method further comprises a step of heating the metal body inserted into the metal body lead-in space by a heating device.

26. (New) The metal molding machine according to claim 20, further comprising cylinders that feed the metal body into the plurality of lead-in spaces, wherein each cylinder is comprised of a first columnar cylinder and a second cylindrical cylinder, the second cylindrical cylinder being slidably mounted in the first columnar cylinder, and extension and retraction of the first cylinder and the second cylinder are separately controlled.

27. (New) The metal molding according to claim 11, further comprising a heating device in sufficient proximity to the lead-in passage to heat the metal body inserted into the metal body lead-in space.